



The **Canadian Animal Health Surveillance System** (CAHSS) is an initiative of the **National Farmed Animal Health and Welfare Council (NFAHWC)**, with broad based collaborative support of industry and governments.

ACHIEVEMENTS & FORWARD AGENDA & 2016-2017

POULTRY

- Creating and expanding network connections
- Collaboration and information sharing – avian influenza and *Salmonella* Enteritidis

SWINE

- Enhancing the syndromic surveillance network
- Modelling disease freedom
- Sharing gene sequences for improved disease management

DAIRY CATTLE

- Building a stakeholder foundation
- Mining data sources
- Enhancing bulk milk tank testing to improve disease management

EQUINE

- Notifiable disease case definitions and information sharing
- Exploring data sharing with Equine Disease Communication Centre

CEZD

Community for Emerging and Zoonotic Diseases

- Y1 Implementation
- Community growth and diversification
- Reliable, trusted weekly intelligence reports

AQUATIC

- Pilot project for on-farm surveillance and information sharing
- Improving information capture, management and use
- Exploring integration of data sources

CAHSS WEBSITE

- “Everything Surveillance”
- Public and private portals
- Confidential information sharing for individual networks



ANTIMICROBIAL USE SURVEILLANCE

- Industry stewardship of responsible antimicrobial use
- Developing a minimum data set



DIRECTORS

- CAHSS Foundational structures
 - ♦ Business case
 - ♦ Data integration and interoperability
 - ♦ Surveillance system evaluation



NEXT STEPS

The further development of the network of networks will focus on 6 major areas:

- ♦ governance
- ♦ funding
- ♦ the formation and maintenance network groups
- ♦ the development of linkages among network groups
- ♦ communications and,
- ♦ the development of integrated data systems

Why CAHSS?

The Canadian Animal Health Surveillance System (CAHSS) is an initiative of the National Farmed Animal Health and Welfare Council (NFAHWC), with broad based collaborative support of industry and governments. It has been designed to address weaknesses in organization and decision making and in information and data-sharing, in animal health surveillance in Canada, as identified in the NFAHWC's report, "Surveillance in a Time of Transition in Farmed Animal Health".

CAHSS creates the space for individuals and groups to come together to collaborate, and seeks to link the diverse networks and individuals affected by animal health surveillance; the role of CAHSS is to link together the networks to encourage more effective, integrated and responsive animal health surveillance.

Who Is Involved?

CAHSS is inclusive of all those involved in or affected by surveillance decisions. Animal health, public health, and wildlife health are represented within the CAHSS networks and the members work on any diseases/issues of concern from reportable, zoonotic, and emerging to production limiting diseases and antimicrobial use surveillance.

What is Next?

The further development of the network of networks will focus on 6 major areas:

- governance;
- funding;
- the formation and maintenance network groups;
- the development of linkages among network groups;
- communications; and,
- the development of integrated data systems.

CAHSS Champions:

The CAHSS champions provide strategic support, enable and facilitate establishment of the network.

CAHSS Directors:

Throughout 2016/17, the Directors Group have been responsible for creating the infrastructure of the CAHSS. Key successes for the Directors include – **Business Case** :

- The CAHSS business case identifies the network of networks model as the best option to meet the current challenges in animal health surveillance in Canada. The model builds on current government and industry initiatives and networks, and will develop collaborative partnerships to decrease costs, and facilitate access to multiple streams of evidence to support animal health management in Canada.

DIRECTORS' ACTIVITIES

DATA INTEROPERABILITY AND INTEGRATION:

The attributes for new and existing network components to link effectively in CAHSS were identified. The CAHSS Directors recommend that existing and developing surveillance components meet the following attributes:

- collaboration across sectors and/or regions;
- flexibility and efficiency;
- sustainability and cost effectiveness;
- confidentiality and trust;
- effective education and training;
- timely reporting; and,
- use of standardized approaches.

SURVEILLANCE SYSTEM EVALUATION:

Three surveillance initiatives were evaluated against 22 attributes within the SERVAl system. Initiatives evaluated included:

- Canada West – Swine Health Intelligence Network;
- Poultry flock sheets; and,
- Ontario Animal Health Network.

The strengths of each component, and the areas for improvement of each were provided. The evaluation of existing systems and identification of strengths and areas for improvement needs to continue in the coming years.

In the coming year, a major objective for the Directors is to continue to grow the network to include all major species groups and enhance connectivity between networks.

POULTRY SECTOR NETWORKS:

The poultry network seeks to expand existing connections and establish additional communications channels on poultry surveillance. Information on current poultry surveillance initiatives were shared at a face to face meeting of the group in November of 2016.

The group began using the CAHSS website to share information, continued quarterly conference calls to further develop of the social network, and have identified key areas for collaboration identifying avian influenza and *Salmonella* Enteritidis as priorities.

A survey of the poultry group was conducted in the spring of 2017 to identify the key areas of interest for collaboration for the coming year.

SWINE SECTOR NETWORKS:

The CAHSS sponsored workshop in winter 2017, focussed on the development and implementation of bilateral agreements between the various stakeholders and networks. The agreements were implemented where possible, and they have enhanced communications nationally.

Three proposals were identified by the Swine surveillance network in March 2017: i) creation of a disease freedom model using data from the Canadian Animal Health Surveillance Network and the Canadian Swine Health Intelligence Network (CSHIN); ii) Enhance the efficiency and value of the current syndromic surveillance network; iii) The sharing of swine enzootic virus sequences to understand and inform disease management in Canada.

ANTIMICROBIAL USE SURVEILLANCE:

A cross sector ad hoc antimicrobial use (AMU) surveillance group met for a face-to-face meeting in October of 2016 and identified a shared purpose "To inform decision-making to objectively address AMU stewardship and to maintain public trust in the sustainable production of safe and affordable food from humanely-raised animals".

Collaboration throughout the fiscal year was ongoing, and the objective of the identification of the minimum data set is expected to be realized in mid-2017.

EQUINE NATIONAL HEALTH SURVEILLANCE:

The Equine National Health Surveillance Group was initiated in November 2016. Information sharing on notifiable diseases was identified as an early priority and sharing began on the CAHSS website in early 2017. Working groups were established in i) leadership ii) Equine Disease Communication Centre and iii) notifiable diseases.

Upcoming activities include the analysis of historic disease trends, a case definition working group, and the identification of the options for mapping the distribution of diseases nationally.

CAHSS WEBSITE: www.cahss.ca

The CAHSS website was created and launched in 2016 to enable information sharing. The website includes both public and private sides, which enables communication with the public, as well as providing a space for more confidential information sharing by individual networks. In the coming year, the website will be further developed to enable information sharing.

DAIRY CATTLE SECTOR NETWORKS

During a CAHSS sponsored workshop in the winter of 2017, the Dairy sector identified their priorities have begun to implement the following:

- Creation of a stakeholder engagement plan;
- Creation of a national information sharing platform;
- Identifying the existing data sources, important questions, needed outputs;
- Evaluating bulk milk tank testing: Improve disease management through knowledge of farm status and benchmarks.

AQUATIC SECTOR NETWORKS

A workshop in March of 2016 examined the needs and opportunities for improved information capture, management and use for animal health in Canada. A draft design and implementation plan to pilot a system that can incorporate data capture, integration, analysis and reporting was completed.

A pilot project estimated the value of on farm clinical surveillance in West Coast Atlantic Salmon. In the coming year, a series of industry workshops will demonstrate how the system can be used and the option for integration of existing data sources will be investigated.

COMMUNITY FOR EMERGING AND ZOOONOTIC DISEASES

The CEZD completed its 3-year project phase in March 2016. Currently, CEZD is in a 2-year implementation phase, funded by the CFIA and PHAC, with strong in kind support from Provincial, Academic and Industry partners. The community grew to 138 individuals as a result of outreach and the reliable weekly generation of intelligence reports; report distribution is increasing and the reports are also now publically posted on the CAHSS website.

A survey conducted with the Canadian Animal Health Coalition was instrumental in increasing industry awareness of and participation in the initiative. In September of 2016, the CAHSS Directors agreed to become the governance body for CEZD.

In the coming year, CEZD will focus on

- organizational development and shared leadership;
- collaboration and integrated animal health surveillance;
- efficient and timely reporting and analysis;
- enhanced communication efforts; and,
- planning for the post-implementation phase.